



# ecology and environment, inc.

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International Specialists in the Environment

## MEMORANDUM

DATE: January 27, 1988

TO: John Osborn, FIT-RPO, USEPA, Region X  
FOR: Joyce Crosson, RSCC, USEPA, Region X  
THRU: David Buecker, FIT-OM, E&E, Seattle 1/25  
FROM: James Herndon, Chemist, E&E, Seattle JEH  
Andrew Hafferty, Senior Chemist, E&E, Seattle 09/17  
SUBJ: QA of Case 8383 (Organics)  
Monsanto Chemical  
REF: F10-8702-06  
CC: Raleigh Farlow, ESD-DPO, USEPA, Region X  
Gerald Muth, DPO, USEPA, Region X Laboratory  
John Osborn, ESD-PO, USEPA, Region X  
Deborah Flood, HWD-SM, USEPA, Region X  
Jeff Whidden, FIT-PO, E&E, Seattle

This is a resubmittal of the Quality Assurance package of Case 8383 as per the instructions of Raleigh Farlow, ESD-DPO, USEPA, Region X on 12/29/87.

The Quality Assurance review of four samples, Case 8383, collected from Monsanto Chemical, has been completed. Four water samples were analyzed at low level for Volatiles, Semivolatiles and Pesticides/PCBs by Data Chem Inc., of Salt Lake City, Utah. The samples were numbered:

JC-754  
JC-755

JC-756  
JC-757

### Data Qualifications

The following comments refer to the laboratory performance in meeting the Quality Control Specifications outlined in IFB WA - 87K236-238.

F A R 1.7 0003

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1) Timeliness - Acceptable

Sample Number	Sample Date	Recd. Date	VOA Anal.	BNA Extr.	BNA Anal.	PEST Extr.	PEST Anal.
JC-754	11-03	11-05	11-08	11-06	11-10	11-05	11-11
JC-755	11-03	11-05	11-08	11-06	11-10	11-05	11-11
JC-756	11-03	11-05	11-11	11-06	11-10	11-05	11-11
JC-757	11-03	11-05	11-09	11-06	11-10	11-05	11-11

2) Instrument Tuning - Acceptable

All tuning check compound mass abundances and ratios were within contract required limits.

The rounding method used when transferring the relative intensity (RI) data from the raw BFB and DFTPP spectra listings to the tuning form is inconsistent. The BFB spectra of 10/29/87 had mass 176 with an RI of 83.03 rounded to 83.1. The BFB spectra of 11/8/87 had mass 96 with an RI of 8.99 rounded to 8.9. Several more examples of the inconsistency were found.

3) Initial Calibration - Acceptable

All SPCC and CCC compounds were within contract required limits.

The raw data sheets for the semivolatile compounds Benzoic acid, 2,4,5-Trichlorophenol, 2-Nitroaniline, 3-Nitroaniline, 4-Nitroaniline, 2,4-Dinitrophenol, 4-Nitrophenol, 4,6-Dinitro-2-methylphenol and Pentachlorophenol showed detection and generation of a Relative Response Factor (RRF) for the 20 ng standard runs on 10/21/87 and 11/24/87. These RRF were consistent with those generated by the standards run at higher concentrations on the same day but were not included in the initial calibration form. The exclusion did not adversely affect the Average Relative Response Factor (ARRF) or the Percent Relative Standard Deviation (%RSD) significantly.

The raw data sheets for the volatile initial calibration show the Methylene chloride and Acetone referenced to an non-internal standard compound for the calculation of Relative Response Factor (RRF) for all of the standard runs in the initial calibration of 10/29/87. The numbers on the raw data sheets were incorrect, but the numbers on the initial calibration form were the corrected RRF.

The following non-SPCC compounds had an Average Relative Response Factor (ARRF) less than 0.05 for semivolatiles and 0.300 for volatiles in the initial calibration.

Date	Compound	Fraction	ARRF
10-29	4-Chloroaniline	BNA	0.013
10-29	1,2-Dichloropropane	VOA	0.255
10-29	2-Butanone	VOA	0.029
10-29	4-Methyl-2-pentanone	VOA	0.290
11-10	2-Butanone	VOA	0.026
11-10	Acetone	VOA	0.059
11-10	Carbon disulfide	VOA	0.122
11-10	Vinyl acetate	VOA	0.198

ARRF = Average Relative Response Factor

The following non-CCC compounds had a Percent Relative Standard Deviation (%RSD) for the initial calibration greater than 30%.

Date	Compound	Fraction	%RSD
10-29	Vinyl acetate	VOA	109.5
11-11	Vinyl acetate	VOA	78.3

%RSD = Percent Relative Standard Deviation

4) Continuing Calibrations - Acceptable

All SPCC and CCC compounds were within contract required limits.

The Relative Response Factor (RRF)s for the volatile compounds 1,1-Dichloroethene, 1,1-Dichloroethane, cis-1,3-Dichloropropene and trans-1,3-Dichloropropene for the continuing calibration on 11-8-87 were calculated properly on the raw data sheet but were transferred incorrectly to the calibration form. The incorrect entries did not affect the Relative Response Factor (RRF) or the Percent Difference (%D) significantly.

The following non-SPCC compounds had Relative Response Factors (RRF) less than 0.05 for semi-volatiles and 0.300 for volatiles in the continuing calibration.

Date	Compound	Fraction	RRF
11-08-87	2-Butanone	VOA	0.023
11-08-87	1,2-Dichloropropane	VOA	0.255
11-08-87	4-Methyl-2-pentanone	VOA	0.290
11-09-87	2-Butanone	VOA	0.020
11-09-87	1,2-Dichloropropane	VOA	0.255
11-09-87	4-Methyl-2-pentanone	VOA	0.290
11-11-87	Acetone	VOA	0.054
11-11-87	2-Butanone	VOA	0.023
11-11-87	Carbon Disulfide	VOA	0.122
11-11-87	Vinyl acetate	VOA	0.198
11-10-87	4-Chloroaniline	BNA	0.009
11-24-87	4-Chloroaniline	BNA	0.017

RRF = Relative Response Factor

The following non-CCC compounds had a Percent Difference (%D) greater than 25% for the continuing calibration.

Date	Compound	Fraction	%D
11-08-87	Chloromethane	VOA	-28.5
11-08-87	Methylene chloride	VOA	-59.5
11-08-87	Acetone	VOA	82.5
11-08-87	Carbon disulfide	VOA	-79.6
11-08-87	1,1-Dichloroethane	VOA	-35.0
11-08-87	Carbon tetrachloride	VOA	27.9
11-08-87	Vinyl acetate	VOA	43.3
11-09-87	Methylene chloride	VOA	-51.1
11-09-87	Acetone	VOA	78.6
11-09-87	Carbon disulfide	VOA	-81.4
11-09-87	2-Butanone	VOA	28.6
11-09-87	Carbon tetrachloride	VOA	28.3
11-09-87	Vinyl acetate	VOA	49.6

Date	Compound	Fraction	%D
11-11-87	Chloromethane	VOA	-40.3
11-11-87	Carbon disulfide	VOA	-25.4
11-11-87	Vinyl acetate	VOA	-43.4
11-10-87	4-Chloroaniline	BNA	30.8
11-10-87	Hexachlorocyclopentadiene	BNA	42.6
11-10-87	2,4-Dinitrophenol	BNA	34.8
11-10-87	4-Nitrophenol	BNA	48.6
11-10-87	4-Nitroaniline	BNA	44.3

%D = Percent Difference

5) Instrument Detection Limits

The Instrument Detection Limits (IDL) were not supplied for any of the analytical equipment.

6) Blanks - Acceptable

All of the blanks for the volatile, semivolatile and pesticide/PCB analyses met the contract required limits for background contamination.

Fraction	Compound	Concentration ug/kg	CRQL ug/kg
VOA	Acetone	10	10

CRQL = Contract Required Detection Limit

The level of acetone contamination was below the CRDL and did not require any action.

7) Pesticide Standards

a) Linearity - Acceptable

The evaluation standards met the contract required limits of less than 10% relative standard deviation for linearity.

b) DDT Retention Time - Acceptable

The retention time for DDT met or exceeded 12 minutes for the standard runs.

c) Retention Time Windows - Acceptable

The retention time windows met the contract specifications.

d) Analytical Sequence - Acceptable

The analytical sequence met the contract required frequency and order.

e) 4,4'-DDT/Endrin Degradation - Acceptable

The percent breakdown for Endrin and DDT did not exceed the contract limit of 20% for the individual or combined breakdown totals.

f) Dibutylchlorendate Retention Time Shift - Acceptable

The Percent Difference (%D) calculated for the retention time of Dibutylchlorendate did not exceed 2% for the packed column.

g) Standards Summary - Acceptable

No pesticides or PCBs were identified. No action is required.

8) Surrogate Recovery - Acceptable

The surrogate recoveries for the volatile, semivolatile and pesticide/PCB analyses were within contract advisory limits.

9) Matrix Spike and Matrix Spike Duplicate - Acceptable

The Matrix Spike (MS) and Matrix Spike Duplicate (MSD) analyses for the volatile, semivolatile and pesticide/PCBs were within contract advisory limits.

10) Sample Analysis

The Average Relative Response Factor for 4-Chloroaniline was less than 0.050 for the semi-volatile initial calibration of October 29, 1987. Reports were flagged "J" (estimated) and detection limits flagged "UJ" (undetected, estimated quantitation limit) for all samples.

The Average Relative Response Factors for 1,2-Dichloropropane, 2-Butanone, and 4-Methyl-2-pentanone were less than 0.300 for the volatile ini-

tial calibration of October 29, 1987. Reports were flagged "J" (estimated) and detection limits flagged "UJ" (undetected, estimated quantitation limit) for JC-754, JC-755, and JC-757.

The Average Relative Response Factors for 2-Butanone, Acetone, Carbon disulfide, and Vinyl acetate were less than 0.300 for the volatile initial calibration of November 10, 1987. Reports were flagged "J" (estimated) and detection limits flagged "UJ" (undetected, estimated quantitation limit) for sample JC-756.

The Relative Standard deviation for Vinyl acetate was greater than 30% for the volatile initial calibrations of October 29, 1987 and November 11, 1987. Reports were flagged "J" (estimated) and detection limits flagged "UJ" (undetected, estimated quantitation limit) for all samples.

The Average Relative Response Factors for 2-Butanone, 1,2-Dichloropropane, and 4-Methyl-2-pentanone were less than 0.300 for the volatile continuing calibration of November 8, 1987. Reports were flagged "J" (estimated) and detection limits flagged "UJ" (undetected, estimated quantitation limit) for samples JC-754 and JC-755.

The Average Relative Response Factors for 2-Butanone, 1,2-Dichloropropane, and 4-Methyl-2-pentanone were less than 0.300 for the volatile continuing calibration of November 9, 1987. Reports were flagged "J" (estimated) and detection limits flagged "UJ" (undetected, estimated quantitation limit) for sample JC-757.

The Average Relative Response Factors for Acetone, 2-Butanone, Carbon disulfide, and Vinyl acetate were less than 0.300 for the volatile continuing calibration of November 11, 1987. Reports were flagged "J" (estimated) and detection limits flagged "UJ" (undetected, estimated quantitation limit) for sample JC-756.

The Average Relative Response Factor for 4-Chloroaniline was less than 0.050 for the semi-volatile continuing calibration run of November 10, 1987. Reports were flagged "J" (estimated) and detection limits flagged "UJ" (undetected, estimated quantitation limit) for all samples.

The Percent Differences for Chloromethane, Methylene chloride, Acetone, Carbon disulfide, 1,1-Dichloroethane, Carbon tetrachloride, and Vinyl acetate were greater than 25% in the volatile continuing calibration run of November 8, 1987. Reports were flagged "J" (estimated) and detection limits flagged "UJ" (undetected, estimated quantitation limit) for samples JC-754 and JC-755.

The Percent Differences for Methylene chloride, Acetone, Carbon disulfide, 2-Butanone, Carbon tetrachloride, and Vinyl acetate were greater than 25% in the volatile continuing calibration run of November 9, 1987. Reports were flagged "J" (estimated) and detection limits flagged "UJ" (undetected, estimated quantitation limit) for sample JC-757.

The Percent Differences for Chloromethane, Carbon disulfide, and Vinyl acetate were greater than 25% in the volatile continuing calibration run of November 11, 1987. Reports were flagged "J" (estimated) and detection limits flagged "UJ" (undetected, estimated quantitation limit) for sample JC-756.

The Percent Differences for 4-Chloroaniline, Hexachlorocyclopentadiene, 2,4-Dinitrophenol, 4-Nitrophenol, and 4-Nitroaniline were greater than 25% in the semi-volatile continuing calibration run of November 10, 1987. Reports were flagged "J" (estimated) and detection limits flagged "UJ" (undetected, estimated quantitation limit) for all samples.

11) Laboratory Contact - No laboratory contact was required.

The laboratory resubmitted the data packet. The corrections made were not associated with the analytical aspect of the packet, as reviewed in our memorandum of December 22, 1987, but provide classification of data qualifiers.

Data Use

The usefulness of the data is based on the criteria outlined in the "Laboratory Data Validation Functional Guidelines for Evaluating Organics and Pesticides/PCB Analyses" (R-582-5-5-01).

Upon consideration of the data qualifications noted above, the BNA, Volatile and Pesticide/PCB data are ACCEPTABLE for use except where flagged with data qualifiers that modify the usefulness of the individual values.

This data package refers to samples not collected by FIT. Data completeness is unknown.

Data Qualifiers

U - The material was analyzed for, but was not detected. The associated numerical value is an estimated sample quantitation limit.

J - The associated numerical value is an estimated quantity because quality control criteria were not met or concentrations reported were less than the CRQL.

R - Quality Control indicates that data are unusable (compound may or may not be present). Resampling and reanalysis are necessary for verification.

Q - No analytical result.

Data Qualifiers (Cont.)

- N - Presumptive evidence of presence of material (tentative identification).
- B - The compound was found in the laboratory blank as well as the sample.
- M - Mass spectral criteria for positive identification were not met. However, in the opinion of the laboratory, the identification is correct based on the analyst's professional judgement.
- F - Concentration of this compound exceeds either the primary or secondary drinking water standard listed in the Safe Drinking Water Act of 1974.

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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

JC754

Lab Name: DATACHEM INC.

Contract: 68-01-7466

Lab Code: DATAC Case No.: 8383

SAS No.: \_\_\_\_\_ SDG No.: JC754

Matrix: (soil/water) WATER

Lab Sample ID: CLP1005

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: BG97CLP5

Level: (low/med) LOW

Date Received: 11/05/87

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 11/09/87

Column: (pack/cap) PACK

Dilution Factor: 1.00

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

74-87-3-----	Chloromethane	10	UJ
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	0.4	J
67-64-1-----	Acetone	15	J
75-15-0-----	Carbon Disulfide	5	J
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	UJ
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	10	UJ
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	UJ
108-05-4-----	Vinyl Acetate	10	UJ
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	UJ
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	10	UJ
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
-----	Total Xylenes	5	U

JEN  
1/26/87

1E  
SEMOVOLATILE ORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

JC754

Lab Name: DATACHEM INC.

Contract: 66-01-7486

Lab Code: DATA~~C~~ Case No.: 8383

SAS No.: \_\_\_\_\_

SDG No.: JC754

Matrix: soil water / WATER

Lab Sample ID: CLP1006

Sample wt/vol: 1.00 g/mL ML

Lab File ID: UC9JC754

Level: Low/med LOW

Date Received: 11-05-87

% Moisture: not dec. dec. \_\_\_\_\_

Date Extracted: 11-06-87

Extraction: SepP/Cont/Sono SEPF

Date Analyzed: 11-10-87

GPC Cleanup: Y/N N

pH: 7.0

Dilution Factor: 1.00

## CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

108-95-2	Phenol	10	10
111-44-4	bis(2-Chloroethyl)Ether	10	10
95-57-8	2-Chlorophenol	10	10
541-73-1	1,3-Dichlorobenzene	10	10
106-46-7	1,4-Dichlorobenzene	10	10
100-51-8	Benzyl Alcohol	10	10
26-50-1	1,2-Dichlorobenzene	10	10
26-43-7	2-Methylphenol	10	10
33635-31-3	bis(2-Chloroisopropyl)Ether	10	10
106-44-5	4-Methylphenol	10	10
621-64-7	N-Nitroso-Di-n-Propylamine	10	10
67-71-1	Hexachloroethane	10	10
98-95-3	Nitrobenzene	10	10
78-69-1	Isophorone	10	10
82-75-5	2-Nitrophenol	10	10
105-67-3	2,4-Dimethylphenol	10	10
65-85-0	Benzoic Acid	50	10
111-31-1	bis(2-Chloroethoxy)Methane	10	10
120-83-2	2,4-Dichlorophenol	10	10
110-82-1	1,2,4-Trichlorobenzene	10	10
31-20-3	Naphthalene	10	10
106-47-8	4-Chloraniline	10	10A
97-68-3	Hexachlorobutadiene	10	10
59-60-7	4-Chloro-3-Methylphenol	10	10
91-57-6	2-Methylnaphthalene	10	10
77-47-4	Hexachlorocyclopentadiene	10	10A
86-06-1	2,4,6-Trichlorophenol	10	10
95-95-4	2,4,5-Trichlorophenol	50	10
91-53-7	2-Chlorophthalylene	10	10
88-74-4	2-Nitroaniline	50	10
131-11-3	Dimethyl Phthalate	10	10
203-96-8	Acenaphthylene	10	10
606-20-2	2,6-Dinitrotoluene	10	10

10/16/87  
EAF

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FORM 1 SV-1

1 Rev.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: DATACHEM INC. Contract: 65-01-7466 JC754  
Lab Code: DATAC Case No.: 6362 SAB No.: 2DG No.: 10784  
Matrix: soil/water WATER Lab Sample ID: CLP1285  
Sample wt/vol: 1000 mg/mL ML Lab File ID: 0035754  
Level: low/med LQW Date Received: 11-05-87  
% Moisture: not dec. dec. Date Extracted: 11-06-87  
Extraction: SepP/Cent. Sono. SEPP Date Analyzed: 11-12-87  
GPC Cleanup: Y-N N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS:		
		ug/L or ug/Kg	ug/L	Q
99-29-2	3-Nitroaniline	50	10 <sup>4</sup>	
63-02-8	Acenaphthene	10	10 <sup>3</sup>	
51-28-5	2,4-Dinitrophenol	50	10 <sup>3</sup>	
100-02-7	4-Nitrophenol	50	10 <sup>3</sup>	
101-64-9	Dibenzofuran	10	10 <sup>3</sup>	
101-14-2	2,4-Dinitrotoluene	10	10 <sup>3</sup>	
84-66-2	Diethylphthalate	10	10 <sup>3</sup>	
7005-71-3	4-Chlorophenyl-phenylether	10	10 <sup>3</sup>	
86-73-7	Fluorene	10	10 <sup>3</sup>	
100-18-6	4-Nitroaniline	50	10 <sup>3</sup>	
504-81-1	4,6-Dinitro-2-Methylphenol	50	10 <sup>3</sup>	
38-38-6	N-Nitrosodiphenylamine (I)	10	10 <sup>3</sup>	
101-53-3	4-Bromophenyl-phenylether	10	10 <sup>3</sup>	
115474-1	Hexachlorobenzene	10	10 <sup>3</sup>	
37-86-6	Pentachloropheno	50	10 <sup>3</sup>	
65-01-8	Phenanthrene	10	10 <sup>3</sup>	
123-11-7	Anthracene	10	10 <sup>3</sup>	
34-74-2	Di-n-Butylphthalate	10	10 <sup>3</sup>	
206-44-0	Fluoranthene	10	10 <sup>3</sup>	
109-00-0	Pyrene	10	10 <sup>3</sup>	
35-68-7	Butylbenzylphthalate	10	10 <sup>3</sup>	
91-94-1	3,3'-Dichlorobenzidine	20	10 <sup>3</sup>	
56-55-3	Benz(a)Anthracene	10	10 <sup>3</sup>	
213-21-3	Chrysene	10	10 <sup>3</sup>	
117-81-7	bis(2-Ethylhexyl)Phthalate	10	10 <sup>3</sup>	
117-84-3	Di-n-Octyl Phthalate	10	10 <sup>3</sup>	
205-99-1	Benz(b)Fluoranthene	10	10 <sup>3</sup>	
207-08-9	Benz(k)Fluoranthene	10	10 <sup>3</sup>	
50-32-8	Benz(a)Pyrene	10	10 <sup>3</sup>	
193-29-5	Indeno(1,2,3- <i>cd</i> )Pyrene	10	10 <sup>3</sup>	
58-70-3	Dibenz(a,h)Anthracene	10	10 <sup>3</sup>	
101-24-2	Benz(g,h,i)Perylene	10	10 <sup>3</sup>	

\* - Cannot be separated from Diphenylamine

100024

168  
10/22/87

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

JC754

Lab Name: DATAChem INC.

Contract: 68-01-7466

Lab Code: DATAc Case No.: 8383

SAS No.: \_\_\_\_\_ SDG No.: JC754

Matrix: (soil/water) WATER

Lab Sample ID: CLP1005

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: BG97CLP5

Level: (low/med) LOW

Date Received: 11/05/87

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 11/09/87

Column (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	-

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FORM I VOA-TIC

recycled paper

ecology and environment

1/87 Rev.

1F  
SEMICVOLATILE ORGANIC ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: DATACHEM INC.

Sample ID: E1-01-7466

JC754

Lab Code: DATAC

Case No.: 5363

PAS No.:

SEG No.: LCTEA

Matrix: soil/water: WATER

Lab Sample ID: CLP100E

Sample wt/vol: 1000 mg/mL ML

Lab File ID: UQBQJTEA

Level: (low/med) LOW

Date Received: 11/25/97

% Moisture: not dec.        dec.       

Date Extracted: 11/06/97

Extraction: (Sep/F/Cent/Frac) SEPF

Date Analyzed: 11/10/97

SPC Cleanup: (Y/N) N pH: 7.0

Dilution Factors 1.00

Number TICs found: 2

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.
=====	=====	=====	=====

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

JC755

Lab Name: DATAChem INC.

Contract: 68-01-7466

Lab Code: DATAc Case No.: 8383

SAS No.: \_\_\_\_\_ SDG No.: JC754

Matrix: (soil/water) WATER

Lab Sample ID: CLP1006

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: BG98CLP6

Level: (low/med) LOW

Date Received: 11/05/87

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 11/09/87

Column: (pack/cap) PACK

Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
74-87-3-----	Chloromethane	10	UJ
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	UJ
67-64-1-----	Acetone	8	J
75-15-0-----	Carbon Disulfide	5	UJ
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	UJ
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	10	UJ
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	UJ
108-05-4-----	Vinyl Acetate	10	UJ
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	UJ
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	10	UJ
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
-----	Total Xylenes	5	U

JEPH  
1/26/88

1B  
SEMITRIVATILE ORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: DATACHEM INC. Contract: 66-01-7466 JC755  
 Lab Code: DATA Case No.: 8353 SAG No.: \_\_\_\_\_  
 SOD No.: JC754  
 Matrix: soil water WATER Lab Sample ID: CLP100E  
 Sample wt/vol: 1000 mg/mL ML Lab File ID: JC180JC755  
 Level: low-med. LOW Date Received: 11-05-87  
 % Moisture: not dec. dec. Date Extracted: 11-06-87  
 Extraction: SepP/Cert Sonc. SEP Date Analyzed: 11-10-87  
 GPC Cleanup: Y/N: N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS:		
		(ug/L or ug/Kg)	UG/L	Q
108-95-1	-Phenol	10	10	-
111-44-4	-bis(2-Chloroethyl)Ether	10	10	
95-67-8	-2-Chlorophenol	10	10	
541-73-1	-1,3-Dichlorobenzene	10	10	
106-48-7	-1,4-Dichlorobenzene	10	10	
120-51-8	-Benzyl Alcohol	10	10	
95-68-1	-1,2-Dichlorobenzene	10	10	
95-43-7	-2-Methylphenol	10	10	
39616-32-9	-bis(2-Chloroisopropyl)Ether	10	10	
106-44-8	-4-Methylphenol	10	10	
521-64-7	-N-Nitroso-Di-n-Propviamine	10	10	
57-71-1	-Hexaschloroethane	10	10	
93-95-3	-Nitrobenzene	10	10	
73-89-1	-Isophorone	10	10	
38-75-5	-3-Nitrophenol	10	10	
105-67-9	-3,4-Dimethylphenol	10	10	
65-85-0	-Benzoic Acid	50	50	
111-91-1	-bis(2-Chloroethoxy)Methane	10	10	
122-83-2	-2,4-Dichlorophenol	10	10	
100-81-1	-1,2,4-Trichlorobenzene	10	10	
91-20-3	-Naphthalene	10	10	
106-47-8	-4-Chloroaniline	10	10	5
37-66-3	-Hexachlorobutadiene	10	10	
59-58-7	-4-Chloro-3-Methylphenol	10	10	
31-57-6	-2-Methylnaphthalene	10	10	
77-47-4	-Hexachlorocyclopentadiene	10	10	5
66-06-2	-3,4,6-Trichlorophenol	10	10	
95-95-4	-2,4,5-Trichlorophenol	50	50	
31-58-7	-3-Chloronaphthalene	10	10	
58-74-4	-2-Nitroaniline	50	50	
131-11-3	-Dimethyl Phthalate	10	10	
120-96-6	-Acenaphthylene	10	10	
606-18-2	-2,6-Dinitrotoluene	10	10	

EA  
1/20/88

1C  
SEMICVOLATILE ORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: DATACHEM INC. Contract: 66-01-7466 JC755

Lab Code: DATA1 Case No.: 2333 EAS No.: SDG No.: JC755

Matrix: distilled water WATER Lab Sample ID: CLF1006

Sample wt/vol: 100% mg/mL: ML Lab File ID: UC104875

Level: (low/med) LOW Date Received: 11-05-97

% Moisture: not dec. dec. Date Extracted: 11-06-97

Extraction: (Sep/F/Cont/Sono) SEFF Date Analyzed: 11-12-97

HPLC Cleanup: Y/N N pH: 7.8 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS:		
		ug/L or ug/Kg	ug/L	%
99-09-1	3-Nitroaniline	50	50	-
33-32-9	Acenaphthene	10	10	-
51-23-5	2,4-Dinitrophenol	50	50	-
100-02-7	4-Nitrophenol	50	50	-
132-64-3	Dibenzofuran	10	10	-
121-14-2	2,4-Dinitrotoluene	10	10	-
84-66-1	Diethylphthalate	10	10	-
78-05-7	4-Chlorophenyl-phenylether	10	10	-
56-73-7	Fluorene	10	10	-
102-10-6	4-Nitroaniline	50	50	-
534-60-1	4,6-Dinitro-2-Methyiphenol	50	50	-
36-30-6	N-Nitrosodiphenylamine (I)	10	10	-
101-55-3	4-Bromophenyl-phenylether	10	10	-
115-74-1	Hexachlorobenzene	10	10	-
87-36-5	Pentachlorophenol	50	50	-
55-01-6	Phenanthrene	10	10	-
120-10-7	Anthracene	10	10	-
94-74-2	Di-n-Butylphthalate	10	10	-
106-44-0	Fluoranthene	10	10	-
129-00-0	Pyrene	10	10	-
95-62-7	Butylbenzylphthalate	10	10	-
31-94-1	3,3'-Dichlorobenzidine	20	20	-
56-55-3	Benz(a)Anthracene	10	10	-
118-01-9	Chrysene	10	10	-
117-31-7	bis(2-Ethyhexyl)Phthalate	10	10	-
117-84-0	Di-n-Octyl Phthalate	10	10	-
125-99-2	Benz(b) Fluorenone	10	10	-
107-08-0	Benz(k)Fluoranthene	10	10	-
50-31-8	Benz(a)Pyrene	10	10	-
193-39-5	Indeno[1,2,3- <i>cd</i> ]Pyrene	10	10	-
53-78-3	Dibenzo[a,h]Anthracene	10	10	-
191-24-2	Benzo(g,h,i)Perylene	10	10	-

\*10 = Cannot be separated from Diphenylamine

1126/86

NO949

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

JC755

Lab Name: DATACHEM INC.

Contract: 68-01-7466

Lab Code: DATA Case No.: 8383

SAS No.: \_\_\_\_\_ SDG No.: JC754

Matrix: (soil/water) WATER

Lab Sample ID: CLP1006

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: BG98CLP6

Level: (low/med) LOW

Date Received: 11/05/87

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 11/09/87

Column (pack/cap) PACK

Dilution Factor: 1.00

CONCENTRATION UNITS:

Number TICs found: 0

(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1F  
SEMICOLVATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: DATACHEM INC. Contract: 65-01-7466

JC755

Lab Code: DATAC Case No.: 8383 SAE No.: \_\_\_\_\_ EDG No.: JC755

Matrix: (soil water) WATER Lab Sample ID: CLP1008

Sample wt/vol: 1000 mg/mL ML Lab File ID: UOLJC755

Level: low/med LOW Date Received: 11/05/97

% Moisture: not dec. dec. \_\_\_\_\_ Date Extracted: 11/06/97

Extraction: SepP Sent Sonex SEPF Date Analyzed: 11/10/97

GPC Cleanup: Y N N pH: 7.0 Dilution Factor: 1.00

CONCENTRATION UNITS:  
Number TICs found: 0 (ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

00950

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

JC756

Lab Name: DATACHEM INC.

Contract: 68-01-7466

Lab Code: DATA Case No.: 8383

SAS No.: \_\_\_\_\_ SDG No.: JC754

Matrix: (soil/water) WATER

Lab Sample ID: CLP1007

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: BI28JC756

Level: (low/med) LOW

Date Received: 11/05/87

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 11/11/87

Column: (pack/cap) PACK

Dilution Factor: 1.00

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

<u>74-87-3-----Chloromethane</u>	<u>10</u>	<u>UJ</u>
<u>74-83-9-----Bromomethane</u>	<u>10</u>	<u>U</u>
<u>75-01-4-----Vinyl Chloride</u>	<u>10</u>	<u>U</u>
<u>75-00-3-----Chloroethane</u>	<u>10</u>	<u>U</u>
<u>75-09-2-----Methylene Chloride</u>	<u>5</u>	<u>U</u>
<u>67-64-1-----Acetone</u>	<u>10</u>	<u>UJ</u>
<u>75-15-0-----Carbon Disulfide</u>	<u>5</u>	<u>UJ</u>
<u>75-35-4-----1,1-Dichloroethene</u>	<u>5</u>	<u>U</u>
<u>75-35-3-----1,1-Dichloroethane</u>	<u>5</u>	<u>U</u>
<u>540-59-0-----1,2-Dichloroethene (total)</u>	<u>5</u>	<u>U</u>
<u>67-66-3-----Chloroform</u>	<u>5</u>	<u>U</u>
<u>107-06-2-----1,2-Dichloroethane</u>	<u>5</u>	<u>U</u>
<u>78-93-3-----2-Butanone</u>	<u>10</u>	<u>UJ</u>
<u>71-55-6-----1,1,1-Trichloroethane</u>	<u>5</u>	<u>U</u>
<u>56-23-5-----Carbon Tetrachloride</u>	<u>5</u>	<u>U</u>
<u>108-05-4-----Vinyl Acetate</u>	<u>10</u>	<u>UJ</u>
<u>75-27-4-----Bromodichloromethane</u>	<u>5</u>	<u>U</u>
<u>78-87-5-----1,2-Dichloropropane</u>	<u>5</u>	<u>UJ</u>
<u>10061-01-5-----cis-1,3-Dichloropropene</u>	<u>5</u>	<u>U</u>
<u>79-01-6-----Trichloroethene</u>	<u>5</u>	<u>U</u>
<u>124-48-1-----Dibromochloromethane</u>	<u>5</u>	<u>U</u>
<u>79-00-5-----1,1,2-Trichloroethane</u>	<u>5</u>	<u>U</u>
<u>71-43-2-----Benzene</u>	<u>5</u>	<u>U</u>
<u>10061-02-6-----Trans-1,3-Dichloropropene</u>	<u>5</u>	<u>U</u>
<u>75-25-2-----Bromoform</u>	<u>5</u>	<u>U</u>
<u>108-10-1-----4-Methyl-2-Pentanone</u>	<u>10</u>	<u>UJ</u>
<u>591-78-6-----2-Hexanone</u>	<u>10</u>	<u>U</u>
<u>127-18-4-----Tetrachloroethene</u>	<u>5</u>	<u>U</u>
<u>79-34-5-----1,1,2,2-Tetrachloroethane</u>	<u>10</u>	<u>U</u>
<u>108-88-3-----Toluene</u>	<u>5</u>	<u>U</u>
<u>108-90-7-----Chlorobenzene</u>	<u>5</u>	<u>U</u>
<u>100-41-4-----Ethylbenzene</u>	<u>5</u>	<u>U</u>
<u>100-42-5-----Styrene</u>	<u>5</u>	<u>U</u>
<u>-----Total Xylenes</u>	<u>5</u>	<u>U</u>

jEH  
1/26/88

1B  
SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

JC756

Lab Name: DATACHEM INC.

Contract: 68-01-7466

Lab Code: DATAC Case No.: 3383 SAE No.: SDG No.: 10754

Matrix: soil water WATER

Lab Sample ID: CLP1827

Sample wt/vol: 1000 mg/mL ML

Lab File ID: 0064076

Level: flow/med: LOW

Date Received: 11/05/87

% Moisture: not dec. dec.

Date Extracted: 11/06/87

Extraction: Sep/F/Cent/Sonic

SEPF

Date Analyzed: 11/10/87

GPC Cleanup: Y/N: N

pH: 7.0

Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
108-25-2	-Phenol	10	10	
111-44-4	-bis(2-Chloroethyl)-Ether	10	10	
95-57-8	-2-Chlorophenol	10	10	
541-73-1	-1,3-Dichlorobenzene	10	10	
106-46-7	-1,4-Dichlorobenzene	10	10	
100-51-6	-Benzyl Alcohol	10	10	
95-50-1	-1,2-Dichlorobenzene	10	10	
95-18-7	-2-Methylphenol	10	10	
196-33-32-9	-bis(2-Chloroisopropyl)-Ether	10	10	
106-44-5	-4-Methylphenol	10	10	
621-64-7	-N-Nitroso-Di-n-Propylamine	10	10	
67-71-1	-Hexachloroethane	10	10	
96-95-8	-Nitrobenzene	10	10	
78-59-1	-Isophorone	10	10	
56-75-5	-2-Nitrophenol	10	10	
105-67-9	-2,4-Dimethylphenol	10	10	
65-85-0	-Benzoic Acid	50	50	
111-91-1	-bis(2-Chloroethyl)Methane	10	10	
128-83-2	-2,4-Dichlorophenol	10	10	
128-82-1	-1,2,4-Trichlorobenzene	10	10	
91-20-3	-Naphthalene	10	10	
106-47-8	-4-Chloraniline	10	10	
97-68-3	-Hexachlorobutadiene	10	10	
59-53-7	-4-Chloro-3-Methyiphenol	10	10	
91-57-6	-2-Methylnaphthalene	10	10	
77-47-4	-Hexachlorocyclopentadiene	10	10	
88-06-2	-2,4,6-Trichlorophenol	10	10	
95-95-4	-2,4,5-Trichlorophenol	50	50	
91-58-7	-2-Chloronaphthalene	10	10	
88-74-4	-2-Nitroaniline	50	50	
131-11-3	-Dimethyl Phthalate	10	10	
108-96-8	-Acenaphthylene	10	10	
506-20-2	-2,6-Dinitrotoluene	10	10	

1/26/88  
J.E.H.

00963

FORM I SV-1

1-27 Rev.

1C  
SEMICOLATILE ORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

JC756

Lab Name: DATACHEM INC.

Contract: 68-01-7466

Lab Code: DATAZ Case No.: 6583 SAB No.: SAB NO.: 3075

Matrix (soil/water) WATER

Lab Sample ID: 11P107

Sample wt/vol: 1000 mg/mL ML

Lab File ID: 1000756

Level: low-med LOW

Date Received: 11/26/87

% Moisture: not dec. dec.

Date Extracted: 11/28/87

Extraction: SepP (cont. time)

SepP

Date Analyzed: 11/28/87

BPC Cleanup: Y N N

pH: 7.0

Dilution Factor: 1.20

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q
---------	----------	----------------------	---

96-49-2-----3-Nitroaniline	53	10
93-12-9-----Acenaphthene	18	10
51-28-5-----2,4-Dinitrophenol	53	10
100-02-7-----4-Nitrophenol	53	10
131-64-9-----Dibenzofuran	18	10
121-14-2-----1,4-Dinitrotoluene	18	10
94-66-2-----Diethylphthalate	18	10
7005-70-3-----4-Chlorophenyl-phenylether	18	10
38-73-7-----Fluorene	18	10
128-10-6-----4-Nitroaniline	53	10
524-52-1-----4,6-Dinitro-2-Methyphenol	53	10
36-30-6-----N-Nitrosodiphenylamine (1)	18	10
121-53-3-----4-Bromophenyl-phenylether	18	10
118-74-1-----Hexachlorobenzene	18	10
67-66-6-----Pentachlorophenol	50	10
65-01-6-----Phenanthrene	18	10
120-12-7-----Anthracene	18	10
64-74-2-----Di-n-Butylphthalate	18	10
206-44-0-----Fluoranthene	18	10
123-00-0-----Pyrene	18	10
35-66-7-----Eutylbenzylphthalate	18	10
91-94-1-----3,3'-Dichlorobenzidine	53	10
56-55-3-----Benzo(a)Anthracene	18	10
216-01-9-----Chrysene	18	10
117-81-7-----bis(2-Ethylhexyl)Phthalate	18	10
117-84-0-----Di-n-Octyl Phthalate	18	10
105-99-3-----Benzo(b)Fluoranthene	18	10
207-08-9-----Benzo(k)Fluoranthene	10	10
50-32-8-----Benzo(a)Pyrene	18	10
193-39-5-----Indeno(1,2,3-cd)Pyrene	18	10
53-70-3-----Dibenz(a,h)Anthracene	18	10
191-24-2-----Benzo(g,h,i)Perylene	18	10

1+ - Cannot be separated from Diphenylamine

134  
1/26/88

00964

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

JC756

Lab Name: DATACHEM INC. Contract: 68-01-7466

Lab Code: DATAC Case No.: 8383 SAS No.: \_\_\_\_\_ SDG No.: JC754

Matrix: (soil/water) WATER Lab Sample ID: CLP1007

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: BI28JC756

Level: (low/med) LOW Date Received: 11/05/87

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 11/11/87

Column (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1F  
SEMICVOLATILE ORGANIC ANALYSES DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: DATACHEM INC. Contact: 88-01-7456 Job No.: JC756

Lab Code: DATA1 Case No.: 3003 GAS No.: 3DG No.: JC75-

Matrix: soil water WATER Lab Sample ID: GLP1087

Sample wt/vol: 100g/gmL 4L Lab File ID: 00630756

Level: low/med LOW Date Received: 11/05/97

% Moisture: not dev. dec. Date Extracted: 11/06/97

Extraction: SepP/Cent/Schei SEPF Date Analyzed: 11/10/97

SFC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CONCENTRATION UNITS:  
Number TICs found: 0 (ug/L or ug/Hg) UG/L

DB NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

00965

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

JC757

Lab Name: DATAChem INC.

Contract: 68-01-7466

Lab Code: DATAc Case No.: 8383

SAS No.: \_\_\_\_\_ SDG No.: JC754

Matrix: (soil/water) WATER

Lab Sample ID: CLP1008

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: BH07CLP8

Level: (low/med) LOW

Date Received: 11/05/87

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 11/09/87

Column: (pack/cap) PACK

Dilution Factor: 1.00

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	5	UJ
67-64-1-----	Acetone	10	UJ
75-15-0-----	Carbon Disulfide	5	UJ
75-35-4-----	1,1-Dichloroethene	5	U
75-35-3-----	1,1-Dichloroethane	5	U
540-59-0-----	1,2-Dichloroethene (total)	5	U
67-66-3-----	Chloroform	5	U
107-06-2-----	1,2-Dichloroethane	5	U
78-93-3-----	2-Butanone	10	UJ
71-55-6-----	1,1,1-Trichloroethane	5	U
56-23-5-----	Carbon Tetrachloride	5	UJ
108-05-4-----	Vinyl Acetate	10	UJ
75-27-4-----	Bromodichloromethane	5	U
78-87-5-----	1,2-Dichloropropane	5	UJ
10061-01-5-----	cis-1,3-Dichloropropene	5	U
79-01-6-----	Trichloroethene	5	U
124-48-1-----	Dibromochloromethane	5	U
79-00-5-----	1,1,2-Trichloroethane	5	U
71-43-2-----	Benzene	5	U
10061-02-6-----	Trans-1,3-Dichloropropene	5	U
75-25-2-----	Bromoform	5	U
108-10-1-----	4-Methyl-2-Pentanone	10	UJ
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	5	U
108-90-7-----	Chlorobenzene	5	U
100-41-4-----	Ethylbenzene	5	U
100-42-5-----	Styrene	5	U
-----	Total Xylenes	5	U

JEP  
9/26/88

1B  
SEMICVOLATILE ORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: DATACHEM INC. Contract: 62-01-7466

JC757

Lab Code: DATAC Case No.: 5260 SAB No.: \_\_\_\_\_ SOG No.: 50754

Matrix: soil water WATER Lab Sample ID: CLP1000

Sample weight: 1000 mg/mL ML Lab File ID: UG110757

Level: low med LOW Date Received: 11/05/87

% Moisture: not dec. dec. Date Extracted: 11/06/87

Extraction: SepP/Cont. Bondi SEPP Date Analyzed: 11/14/87

CPC Cleanup: Y/N: N pH: 5.0 Dilution Factor: 1.20

CAS NO.	COMPOUND	CONCENTRATION UNITS:		
		ug/L or ug/Kg	ug/L	ug/Kg
108-95-1	Phenol	10	10	1-
111-44-4	bis(2-Chloroethyl)Ether	10	10	-
35-57-6	2-Chlorophenol	10	10	-
541-73-1	1,3-Dichlorobenzene	10	10	-
106-46-7	1,4-Dichlorobenzene	10	10	-
100-51-6	Benzyl Alcohol	10	10	-
35-60-1	1,2-Dichlorobenzene	10	10	-
35-43-7	2-Methylphenol	10	10	-
19605-31-9	bis(2-Chloroisopropyl)Ether	10	10	-
106-44-5	4-Methylphenol	10	10	-
621-64-7	N-Nitroso-Di-n-Propylamine	10	10	-
67-71-1	Hexachloroethane	10	10	-
36-95-3	Nitrobenzene	10	10	-
78-59-1	Isophorone	10	10	-
38-75-5	2-Nitrophenol	10	10	-
105-67-9	3,4-Dimethyphenol	10	10	-
65-85-0	Benzoic Acid	50	50	-
111-91-1	bis(2-Chloroethoxy)Methane	10	10	-
120-83-2	2,4-Dichlorophenol	10	10	-
110-81-1	1,2,4-Trichlorobenzene	10	10	-
91-20-3	Naphthalene	10	10	-
106-47-8	4-Chloraniline	10	10	-
37-68-3	Hexachlorobutadiene	10	10	-
59-53-7	4-Chloro-3-Methylphenol	10	10	-
91-57-6	2-Methylnaphthalene	10	10	-
77-47-4	Hexachlorocyclopentadiene	10	10	-
33-36-2	2,4,6-Trichlorophenol	10	10	-
95-95-4	2,4,5-Trichlorophenol	50	50	-
91-58-7	2-Chloronaphthalene	10	10	-
88-74-4	2-Nitroaniline	50	50	-
131-11-3	Dimethyl Phthalate	10	10	-
208-96-8	Acenaphthylene	10	10	-
626-22-2	2,6-Dinitrotoluene	10	10	-

JEA  
1/26/88

1C  
SEMOVOLATILE ORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

JC757

Lab Name: DATACHEM INC. Contract: 68-01-7466

Lab Code: DATAC Case No.: 3683 SAG No.: SDG No.: JC754

Matrix: (soil+water) WATER Lab Sample ID: DLP1006

Sample wt/vol: 1000 mg/mL ML Lab File ID: UQ1110757

Level: (low/med) LOW Date Received: 11-25-87

% Moisture: not dec. dec. Date Extracted: 11-26-87

Extraction: SepP/Cent/Sono SEPF Date Analyzed: 11-10-87

HPLC Cleanup: (Y/N) N pH: 5.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/L
139-09-2	3-Nitroaniline	50	50
83-32-9	Acenaphthene	10	10
51-28-5	2,4-Dinitrophenol	50	50
100-01-7	4-NitrophenoI	50	50
132-64-9	Dibenzofuran	10	10
121-12-2	2,4-Dinitrotoluene	10	10
84-66-2	Diethylphthalate	10	10
7005-72-0	4-Chlorophenyl-phenylether	10	10
86-73-7	Fluorene	10	10
100-10-6	4-Nitroaniline	50	50
534-52-1	4,6-Dinitro-2-Methyiphenol	50	50
68-30-6	N-Nitroso-diphenylamine (1)	10	10
101-55-3	4-Bromophenyl-phenylether	10	10
115-74-1	Hexachlorobenzene	10	10
37-86-5	Pentachlorophenol	50	50
65-01-8	Phenanthrene	10	10
120-10-7	Anthracene	10	10
64-74-2	Di-n-Butylphthalate	10	10
246-44-0	Fluoranthene	10	10
128-00-0	Pyrene	10	10
35-63-7	Butylbenzylphthalate	10	10
91-94-1	3,3'-Dichlorobenzidine	10	10
56-55-3	Benz(a)Anthracene	10	10
218-01-9	Chrysene	10	10
117-81-7	bis(2-Ethylhexyl)Phthalate	10	10
117-84-0	Di-n-Octyl Phthalate	10	10
205-99-2	Benz(b)Fluoranthene	10	10
207-08-9	Benz(k)Fluoranthene	10	10
50-32-8	Benz(a)Pyrene	10	10
192-39-5	Indeno(1,2,3-cd)Pyrene	10	10
53-70-3	Dibenzo(a,h)Anthracene	10	10
191-24-2	Benz(g,h,i)Perylene	10	10

1\* - Cannot be separated from Diphenylamine

JEA  
1/26/88

00979

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

JC757

Lab Name: DATAChem INC.Contract: 68-01-7466Lab Code: DATAc Case No.: 8383SAS No.: \_\_\_\_\_ SDG No.: JC754Matrix: (soil/water) WATERLab Sample ID: CLP1008Sample wt/vol: 5.0 (g/mL) MLLab File ID: BH07CLP8Level: (low/med) LOWDate Received: 11/05/87

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 11/09/87Column (pack/cap) PACKDilution Factor: 1.00

## CONCENTRATION UNITS:

Number TICs found: 0(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1F  
SEMITRIVELATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

JC757

Lab Name: DATACHEM INC. Contract: EE-01-7466  
Lab Code: DATAC Case No.: 6883 SAB No.:  SGD No.: J075-  
Matrix: soil water: WATER Lab Sample ID: CLF1008  
Sample wt/vol: 1000 mg/mL ML Lab File ID: 021117ET  
Level: Low/med: LOW Date Received: 11-05-87  
% Moisture: Nat. dec.  dec.  Date Extracted: 11-06-87  
Extraction: Sep/Cont. Bond: SEFF Date Analyzed: 11-10-87  
GC Clean-up: C/N: N pH: 5.0 Dilution Factor: 1.00

Number TICs found: 8 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	%
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00980